

**SURFACE-BOUND ANTIGEN BINDING PORTIONS OF ANTIBODIES THAT
BIND TO CTLA-4 AND CD28 AND USES THEREFOR**

Abstract of the Disclosure

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10 The instant invention provides compositions for downmodulation or upmodulation of
the immune response. For example, constructs comprising an exposed surface having
attached to it i) an antigen-binding portion of an antibody that binds to a CTLA-4 or CD28
molecule that is expressed on a T cell of the subject, and ii) an MHC molecule selected from
the group consisting of: a class II molecule that is syngeneic to the subject, a class I molecule
that is syngeneic to the subject, and a class I molecule that is allogeneic to the subject are
provided. Methods of using the molecules of the invention in downmodulation or
upmodulation of the immune response are also provided. Also provided are methods of
downmodulating a immune response in a subject comprising causing a cell of the subject to
15 express an antigen-binding portion of an antibody that binds a CTLA-4 or CD28 molecule
that is expressed on a T cell of the subject, such that the immune response in the subject is
downmodulated. Methods of preparing an allogeneic cell for transplantation and methods of
transplanting engineered allogeneic cells are also provided.